



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,348	08/22/2003	Rajinder Singh	05-314-C	8359

20306 7590 03/30/2006

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

EXAMINER

DAVIS, ZINNA NORTINGTON

ART UNIT	PAPER NUMBER
----------	--------------

1625

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,348	<b>Applicant(s)</b> SINGH ET AL.	
	<b>Examiner</b> Zinna Northington Davis	<b>Art Unit</b> 1625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 46-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-12,15-23,42-45 and 58 is/are rejected.
- 7) ☒ Claim(s) 2,4,13,14 and 24-41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/04;3/04;2/05</u> . | 6) <input type="checkbox"/> Other: _____  |

#### DETAILED ACTION

1. Claims 1-58 are pending.
2. The Correction of Inventorship under 37 CFR 1.48(a) has been considered. The inventor, Henry H. Lu, has been added.
3. In the response filed August 19, 2005, Applicants have elected Group I, claims 1-45 and 58. The compound of claim 9 is the preferred species.
4. Applicants respectfully request that when one or more compound claims are found patentable, the process claims that depend from the allowed compound claims or otherwise include all the limitations of the compound claim be rejoined as a matter of right.
5. Claims 46-57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 19, 2005.
6. Based upon the Remarks filed August 19, 2005, the election of species requirement is withdrawn. The Group I invention is examined as a whole.
7. At this time, rejoinder is not applicable. The compound claims are not drawn to allowable subject matter.
8. Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by

Art Unit: 1625

a diligently filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1, 5-12, 15-23, and 42-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. At claims 1 and 5-12, where is B ring? Clarification is appreciated.

B. At claims 1 and 42, the radicals, "alkyl" and "halogen" are generic and subgeneric which is improper. See the radicals alone and in combination forms.

C. Claims 15-23 are improperly multiple dependent.

D. Claims 42 and 43 improperly depend upon claim 1. Claim 1 does not include plural salts, hydrates, or solvates.

E. Claims 44 and 45 are identical to claim 1.

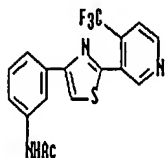
11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 3, 6, and 58 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Takeda Chemical Industries, Ltd. (WO 02/46186, cited by Applicants).

The instantly claimed compounds are disclosed. See RN 435272-05-02 which is depicted below:



The claims are fully met when the structural formula is (I), B or E is N; A is CR<sup>2</sup> or G is CR<sup>6</sup>; X is S; Z is N; R<sup>11</sup> is H; R<sup>12</sup> is alkyl.

13. Claims 2, 4, 13, 14, and 24-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The Information Disclosure Statements filed January 8, 2004, March 4, 2004, and February 25, 2005 have been considered.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zinna N. Davis whose telephone number is 571-272-0682.

16. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications.

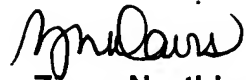
17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/646,348

Page 5

Art Unit: 1625

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Zinna Northington Davis**  
**Primary Examiner**  
**Art Unit 1625**

Znd  
03.27.2006